

PATENT APPLICATION
DOCKET NO.: 100201496-2

LISTING OF THE CLAIMS

Pursuant to 37 C.F.R. §1.121, provided below is a listing of the claims, claims 1-15.

1. (Currently amended) A system for measuring fault coverage in an integrated circuit (IC), comprising:

a Device Under Test (DUT) assembly including said IC, wherein said IC includes at least one node operable to be stimulated to a temporary stuck-at fault condition by a ~~certain~~ frequency of electromagnetic (EM) radiation;

a probe operable to stimulate said DUT assembly with said frequency of EM radiation to create said temporary stuck-at fault condition at one or more nodes of said IC; and

a test pattern generator and interface system interfacing with said DUT assembly, said test pattern generator and interface system operating to apply a test vector to said DUT assembly and receive a corresponding response, wherein said corresponding response is indicative of a fault coverage measurement.

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2. (Original) The system for measuring fault coverage in an IC as recited in claim 1, wherein said IC is disposed on a die.

3. (Original) The system for measuring fault coverage in an IC as recited in claim 1, wherein said IC is disposed on a wafer.

4. (Original) The system for measuring fault coverage in an IC as recited in claim 1, wherein said IC is disposed on a packaged chip.

5. (Original) The system for measuring fault coverage in an IC as recited in claim 1, wherein said probe comprises a laser voltage probe.

6. (Currently amended) The system for measuring fault coverage in an IC as recited in claim 1, wherein said temporary stuck-at fault condition comprises a stuck-at-zero condition.

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7. (Currently amended) The system for measuring fault coverage in an IC as recited in claim 1, wherein said temporary stuck-at fault condition comprises a stuck-at-one condition.

8. (Currently amended) A method for measuring fault coverage in an integrated circuit (IC), comprising:

stimulating a select number of nodes associated with said IC with a certain frequency of electromagnetic (EM) radiation;

creating a temporary stuck-at fault condition at each of said select number of nodes;

applying a test vector set to said IC upon creating said temporary stuck-at fault condition at each of said select number of nodes;

comparing said IC's output against expected results associated with said test vector set; and

determining fault coverage as a percentage of said temporary stuck-at fault conditions detected by said test vector set.

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9. (Currently amended) The method as recited in claim 8, wherein said ~~certain~~ frequency of EM is supplied by a laser voltage probe system.

10. (Currently amended) The method as recited in claim 8, wherein said temporary stuck-at fault condition comprises a stuck-at-zero condition.

11. (Currently amended) The method as recited in claim 8, wherein said temporary stuck-at fault condition comprises a stuck-at-one condition.

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12. (Currently amended) A system for measuring fault coverage in an integrated circuit (IC), comprising:

means for stimulating a temporary stuck-at fault condition at each of a select number of nodes associated with said IC with a ~~certain~~ frequency of electromagnetic (EM) radiation;

means for applying a test vector set to said IC upon creating said temporary stuck-at fault condition at each of said select number of nodes;

means for comparing said IC's output against expected results associated with said test vector set; and

means for determining fault coverage as a percentage of said temporary stuck-at fault conditions detected by said test vector set.

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13. (Currently amended) The system for measuring fault coverage in an IC as recited in claim 12, wherein said means for stimulating a temporary stuck-at fault condition comprises a laser voltage probe system.

14. (Currently amended) The system for measuring fault coverage in an IC as recited in claim 12, wherein said temporary stuck-at fault condition comprises a stuck-at-zero condition.

15. (Currently amended) The system for measuring fault coverage in an IC as recited in claim 12, wherein said temporary stuck-at fault condition comprises a stuck-at-one condition.